

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1. (Original) An electrical switchgear device comprising:
a conductor;
a base;
a current sensor positioned to detect current in the conductor and attached to the base with a support element;
an apparatus mounted to the base to interrupt current through the conductor when a signal from the current sensor indicates a predetermined condition; and
a housing positioned on the base and encapsulating the current sensor, the support element, the current interrupting apparatus, and the conductor.

Claim 2. (Original) The device of claim 1 wherein the housing comprises a solid insulating material.

Claim 3. (Original) The device of claim 1 wherein the support element comprises a rigid tube.

Claim 4. (Original) The device of claim 1 wherein the support element is bent at an end coupled to the current sensor.

Claim 5. (Original) The device of claim 4 wherein the bent end of the support element includes a support strip shaped to match a curvature of the current sensor.

Claim 6. (Original) The device of claim 1 wherein the current sensor includes a sensor conductor that produces the signal.

Claim 7. (Original) The device of claim 6 wherein the support element is hollow and the sensor conductor is drawn through the support element to control circuitry.

Claim 8. (Original) The device of claim 6 wherein the sensor conductor and the support element are hermetically sealed.

Claim 9. (Original) The device of claim 1 wherein the support element is hermetically sealed to the base.

Claim 10. (Original) The device of claim 1 wherein the support element is metallic.

Claim 11. (Original) The device of claim 1 wherein the support element is non-metallic.

Claim 12. (Original) The device of claim 1 wherein the support element is coated with a semi-conductive paint.

Claim 13. (Original) The device of claim 1 wherein the housing encapsulates the current sensor, the support element, the current interrupting apparatus, and the conductor such that there are no dielectric interfaces between the current sensor and the conductor that could lead to a dielectric failure.

Claim 14. (Withdrawn) A method of producing an electrical switchgear device, the method comprising:

securing a support element to a current sensor;

mounting the current sensor relative to a main conductor by securing the support element to a surface of a mold that houses a current interrupter and the conductor; injecting a prepared material into the mold to encapsulate the support element, the current sensor, the conductor, and the current interrupter; and permitting the injected material to solidify to form a housing.

Claim 15. (Withdrawn) The method of claim 14 wherein securing the support element to the current sensor includes drawing sensor conductors from the current sensor through a hollow passage of the support element.

Claim 16. (Withdrawn) The method of claim 14 wherein securing the support element to the current sensor includes bending a first end of the support element and attaching to the first end a support strip shaped to match a curvature of the current sensor.

Claim 17. (Withdrawn) The method of claim 16 wherein securing the support element to the current sensor includes securing the support strip to the current sensor.

Claim 18. (Withdrawn) The method of claim 14 wherein securing the support element to the surface of the mold includes connecting a second end of the support element to a post positioned at the surface of the mold.

Claim 19. (Withdrawn) The method of claim 18 wherein connecting the second end of the support element to the post includes hermetically sealing the second end to the post.

Claim 20. (Withdrawn) The method of claim 18 wherein connecting the second end of the support element to the post includes drawing sensor conductors from the current sensor through a hollow passage of the post.

Claim 21. (Withdrawn) The method of claim 14 further comprising removing the mold from the housing and securing the housing to a tank that houses additional components.

Claim 22. (Withdrawn) The device of claim 14 wherein the housing encapsulates the current sensor, the support element, the current interrupter, and the conductor such that there are no dielectric interfaces between the current sensor and the conductor that could lead to a dielectric failure.